

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-143. (Cancelled)

144. (Currently amended) An isolated antibody or antigen binding portion thereof which binds to prostate specific membrane antigen (PSMA) and competes for binding to ~~prostate specific membrane antigen (PSMA)~~ with a monoclonal antibody selected from the group consisting of a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12101, a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12109, a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12127 and a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12126.

145-155. (Cancelled)

156. (Previously presented) An isolated antibody or antigen binding portion thereof according to claim 144, wherein the antibody is a monoclonal antibody or an antigen binding portion derived from a monoclonal antibody.

157. (Previously presented) An isolated antibody or antigen binding portion thereof according to claim 144, wherein the antibody or antigen binding portion thereof is internalized with the prostate specific membrane antigen.

158. (Previously presented) An isolated antibody or antigen binding portion thereof according to claim 144, wherein the antigen binding portion is selected from the group consisting of a Fab fragment, a F(ab')₂ fragment, and a Fv fragment.

159. (Currently amended) An antibody or antigen binding portion thereof which binds to prostate specific membrane antigen (PSMA) and competes for binding to ~~prostate-specific membrane antigen (PSMA)~~ with a monoclonal antibody selected from the group consisting of a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12101, a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12109, a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12127 and a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12126 wherein said antibody or antigen binding portion thereof is bound to a cytotoxic drug.

160. (Previously presented) An antibody or antigen binding portion thereof according to claim 159, wherein the cytotoxic drug is selected from the group consisting of a therapeutic drug, a compound emitting radiation, molecules of plant, fungal, or bacterial origin, biological proteins, and mixtures thereof.

161. (Previously presented) An antibody or antigen binding portion thereof according to claim 159, wherein the cytotoxic drug is a compound emitting radiation.

162. (Previously presented) An antibody or antigen binding portion thereof according to claim 161, wherein the compound emitting radiation is an alpha-emitter.

163. (Previously presented) An antibody or antigen binding portion thereof according to claim 162, wherein the alpha-emitter is selected from the group consisting of ²¹²Bi, ²¹³Bi, and ²¹¹At.

164. (Previously presented) An antibody or antigen binding portion thereof according to claim 161, wherein the compound emitting radiation is a beta-emitter.

165. (Previously presented) An antibody or antigen binding portion thereof according to claim 164, wherein the beta-emitter is ^{186}Re .

166. (Previously presented) An antibody or antigen binding portion thereof according to claim 164, wherein the beta-emitter is ^{90}Y .

167. (Previously presented) An antibody or antigen binding portion thereof according to claim 161, wherein the compound emitting radiation is a gamma-emitter.

168. (Previously presented) An antibody or antigen binding portion thereof according to claim 167, wherein the gamma-emitter is ^{131}I .

169. (Cancelled)

170. (Previously presented) An antibody or antigen binding portion thereof according to claim 160, wherein the cytotoxic drug is a molecule of plant origin.

171. (Previously presented) An antibody or antigen binding portion thereof according to claim 160, wherein the cytotoxic drug is a biological protein.

172. (Currently amended) An antibody or antigen binding portion thereof which binds to prostate specific membrane antigen (PSMA) and competes for binding to ~~prostate-specific membrane antigen~~ (PSMA) with a monoclonal antibody selected from the group consisting of a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession

number HB-12101, a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12109, a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12127 and a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12126, wherein the antibody or antigen binding portion thereof is bound by a label.

173. (Previously presented) An antibody or antigen binding portion thereof according to claim 172, wherein the label is selected from the group consisting of a fluorescent label, a biologically-active enzyme label, a radiolabel, a nuclear magnetic resonance active label, a luminescent label, and a chromophore label.

174. (Previously presented) An antibody or antigen binding portion thereof according to claim 173, wherein the radiolabel is selected from the group consisting of ^{32}P , ^{125}I , ^3H , ^{14}C , and ^{188}Rh .

175. (Previously presented) An antibody or antigen binding portion thereof according to claim 173, wherein the label is the radiolabel ^{131}I .

176. (Previously presented) An antibody or antigen binding portion thereof according to claim 173, wherein the label is the radiolabel $^{99\text{m}}\text{Tc}$.

177. (Previously presented) An antibody or antigen binding portion thereof according to claim 173, wherein the label is the radiolabel ^{111}In .

178. (Currently amended) An isolated cell which produces an antibody which binds to prostate specific membrane antigen (PSMA) and competes for binding to ~~prostate specific membrane antigen (PSMA)~~ with a monoclonal antibody selected from the group consisting of a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession

number HB-12101, a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12109, a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12127 and a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12126.

179. (Previously presented) The cell of claim 178, which is derived from a lymphocytic cell line.

180. (Currently amended) A composition comprising:

an antibody or antigen binding portion thereof which binds to prostate specific membrane antigen (PSMA) and competes for binding to prostate specific membrane antigen (PSMA) with a monoclonal antibody selected from the group consisting of a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12101, a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12109, a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12127 and a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12126; and

a pharmaceutically acceptable carrier, excipient, or stabilizer.

181. (Currently amended) A kit for detecting prostate cancer comprising:

an antibody or antigen binding portion thereof according to claim 172 and means to detect the label.

182. (Previously presented) A kit according to claim 181, wherein the label is selected from the group consisting of a fluorescent label, a biologically-active enzyme label, a radiolabel, a nuclear magnetic resonance active label, a luminescent label, and a chromophore label.

183. (Previously presented) A kit according to claim 181, wherein the antibody or antigen binding portion thereof is in a composition further comprising a pharmaceutically acceptable carrier, excipient, or stabilizer.

184. (Currently amended) An antibody or antigen binding portion thereof which binds to prostate specific membrane antigen (PSMA) and competes for binding to ~~prostate-specific membrane-antigen-(PSMA)~~ with a monoclonal antibody selected from the group consisting of a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12101, a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12109, a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12127 and a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12126, wherein the antibody or antigen binding portion thereof is coupled to a cytotoxic drug of bacterial origin.

185. (Currently amended) An antibody or antigen binding portion thereof which binds to prostate specific membrane antigen (PSMA) and competes for binding to ~~prostate-specific membrane-antigen-(PSMA)~~ with a monoclonal antibody selected from the group consisting of a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12101, a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12109, a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12127 and a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12126, wherein the antibody or antigen binding portion thereof is coupled to a radioisotope.

186. (Previously presented) An isolated antibody or antigen binding portion thereof according to claim 144, wherein the antibody or antigen binding portion thereof competes for binding with the monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12126.

187. (Previously presented) An isolated antibody or antigen binding portion thereof according to claim 144, wherein the antibody or antigen binding portion thereof competes for binding with the monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12109.

188. (Previously presented) An antibody or antigen binding portion thereof according to claim 159, wherein the antibody is a monoclonal antibody or an antigen binding portion derived from a monoclonal antibody.

189. (Previously presented) An antibody or antigen binding portion thereof according to claim 159, wherein the antibody or antigen binding portion thereof is internalized with PSMA.

190. (Previously presented) An antibody or antigen binding portion thereof according to claim 159, wherein the antigen binding portion is selected from the group consisting of Fab fragment, a F(ab')₂ fragment, and a Fv.

191. (Previously presented) An antibody or antigen binding portion thereof according to claim 159, wherein the cytotoxic drug is a toxin.

192. (Previously presented) An antibody or antigen binding portion thereof according to claim 159, wherein the antibody or antigen binding portion thereof competes for binding with the monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12126.

193. (Previously presented) An antibody or antigen binding portion thereof according to claim 159, wherein the antibody or antigen binding portion thereof competes for binding with the monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession

number HB-12109.

194. (Previously presented) An antibody or antigen binding portion thereof according to claim 172, wherein the antibody or antigen binding portion thereof competes for binding with the monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12126.

195. (Previously presented) An antibody or antigen binding portion thereof according to claim 172, wherein the antibody or antigen binding portion thereof competes for binding with the monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12109.

196. (Previously presented) An antibody or antigen binding portion thereof according to claim 184, wherein the antibody is a monoclonal antibody or an antigen binding portion derived from a monoclonal antibody.

197. (Previously presented) An antibody or antigen binding portion thereof according to claim 184, wherein the antibody or antigen binding portion thereof is internalized with the prostate specific membrane antigen.

198. (Previously presented) An antibody or antigen binding portion thereof according to claim 184, wherein the antigen binding portion is selected from the group consisting of a Fab fragment, a F(ab')₂ fragment, and a Fv fragment.

199. (Previously presented) A composition comprising:
an antibody or antigen binding portion thereof according to claim 184; and
a pharmaceutically acceptable carrier, excipient, or stabilizer.

200. (Previously presented) An antibody or antigen binding portion thereof according to claim 184, wherein the antibody or antigen binding portion thereof competes for binding with the monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12126.

201. (Previously presented) An antibody or antigen binding portion thereof according to claim 184, wherein the antibody or antigen binding portion thereof competes for binding with the monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12109.

202. (Previously presented) An antibody or antigen binding portion thereof according to claim 185, wherein the antibody or antigen binding portion thereof competes for binding with the monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12126.

203. (Previously presented) An antibody or antigen binding portion thereof according to claim 185, wherein the antibody or antigen binding portion thereof competes for binding with the monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12109.

204. (Currently amended) A kit according to claim 181, wherein the prostate cancer is metastasized, ~~selected from the group consisting of renal cancer, urothelial cancer, colon cancer, rectal cancer, lung cancer, breast cancer, metastatic adenocarcinoma to the liver, metastatic cancer to the bone marrow, and metastatic cancer to the lymph nodes.~~

205. (Cancelled)

206. (Previously presented) A kit according to claim 181, wherein the antibody or antigen binding portion thereof competes for binding with the monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12126.

207. (Previously presented) A kit according to claim 181, wherein the antibody or antigen binding portion thereof competes for binding with the monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12109.

208. (Previously presented) A composition comprising:
an antibody or antigen binding portion thereof according to claim 159; and
a pharmaceutically acceptable carrier, excipient, or stabilizer.

209. (Previously presented) An antibody or antigen binding portion thereof which competes for binding to prostate specific membrane antigen (PSMA) with a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12126, wherein the antibody or antigen binding portion thereof is coupled to a cytotoxic drug of bacterial origin.

210. (Previously presented) An antibody or antigen binding portion thereof which competes for binding to prostate specific membrane antigen (PSMA) with a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12109, wherein the antibody or antigen binding portion thereof is coupled to a cytotoxic drug of bacterial origin.

211. (New) An isolated antibody or antigen binding portion thereof according to claim 144, wherein the antibody or antigen binding portion thereof competes for binding with the monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12101.

212. (New) An antibody or antigen binding portion thereof according to claim 159, wherein the antibody or antigen binding portion thereof competes for binding with the monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12101.

213. (New) An antibody or antigen binding portion thereof according to claim 172, wherein the antibody or antigen binding portion thereof competes for binding with the monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12101.

214. (New) The cell according to claim 178, wherein the cell produces an antibody which binds to prostate specific membrane antigen (PSMA) and competes for binding to PSMA with a monoclonal antibody selected from the group consisting of a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12101, a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12109, and a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12126.

215. (New) The composition according to claim 180, the composition comprising an antibody or antigen binding portion thereof which binds to prostate specific membrane antigen (PSMA) and competes for binding to PSMA with a monoclonal antibody selected from the group consisting of a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12101, a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12109, and a monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12126.

216. (New) An antibody or antigen binding portion thereof according to claim 184, wherein the antibody or antigen binding portion thereof competes for binding with the monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12101.

217. (New) An antibody or antigen binding portion thereof according to claim 185, wherein the antibody or antigen binding portion thereof competes for binding with the monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12101.

218. (New) A kit according to claim 181, wherein the antibody or antigen binding portion thereof competes for binding with the monoclonal antibody produced by a hybridoma deposited under ATCC deposit accession number HB-12101.